



Paul R. LePage  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0016

David Bernhardt  
COMMISSIONER

March 12, 2014  
Subject: **New Gloucester & Auburn**  
Federal Project No: NHP-2027(400)  
State WIN: 020274.00 & 008850.40  
**Amendment No. 1**

Dear Sir/Ms:

Make the following changes to the bid document:

In the Bid Book (pages 33 and 37) **REMOVE** the first page of each copy of the "CONTRACT AGREEMENT, OFFER & AWARD" and **REPLACE** with the attached new pages 33 and 37.

In the Bid Book after page 46, **ADD** the attached "MAINE TURNPIKE AUTHORITY" documentation, 7 pages total.

In the Bid Book (page 99) "SPECIAL PROVISION, SECTION 107, Prosecution and Progress, (Contract Time)" **CHANGE** the completion date for the contract in line 3) from "August 1, 2014" to read "**August 15, 2014**". Make this change in pen and ink.

In the Bid Book, after page 138 **ADD** the attached "SPECIAL PROVISION, SECTION 502, ANNULAR SPACE GROUTING" 3 pages dated Mar. 10, 2014.

In the Bid Book (pages 139 and 140) **REMOVE** "SPECIAL PROVISION, SECTION 509, CULVERT SLIPLINING" 2 pages dated March 30, 2000 and **REPLACE** with the attached new "SPECIAL PROVISION, SECTION 509, CULVERT SLIPLINING" 2 pages undated.

The following questions have been received:

**Question:** Item 509.22 Culvert Sliplining, Special Provision 509 states that grout used to fill annular spaces to be paid under Section 502, Annular Space Grouting. There is an item 502 in the item list. Does that mean it is incidental?

**Response:** Yes, it is incidental to the Sliplining.

**Question:** In Special Provision, Section 509, the basis of payment states that grout used to fill the annular space & backfill voids will be paid for under section 502, Annular Space Grouting, but there is no 502 pay item in the Schedule of Items. Will a 502 pay item be added to the Schedule of Items?



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**Response:** There will be no 502 item added to the schedule. Please see the above changes.

**Question:** Upon inspection of the culvert there is an ADS culvert coming into the 72' culvert slip lined from the South side of the pipe. Is this to be connected to the new slip lining or abandoned?

**Response:** MDOT common practice would be not to abandon any existing drainage. Final decision will be made by resident.

**Question:** It is my understanding this project as with regards to the slip lining can not start until July 15<sup>th</sup> and needs to be completed by August 1, 2014 as stated by completion date of the project and time allowed by the ACOE permit. Is this correct? That is a small window for what is being asked to be done with regard to this culvert.

**Response:** The completion date has been changed to August 15, 2014. Please see the above change.

**Question:** The fish weirs are to be made out of HDPE stock; I did not see a detail on how they are to be connected to a metal culvert?

**Response:** Please see the above changes.

**Question:** On sheet 3 of 58 the weir typical calls for 9 weirs and on sheet 30 of 58 it is stating 7 weirs. Which is the correct number of weirs?

**Response:** 9 weirs Ref: sheet #3 of 58 for typical.

**Question:** In the Special Provisions it states aluminum plate pipe as the liner material then states meeting Corrugated Aluminum pipe specifications, these are two different types of pipe. Which one is being specified for this project? If structural plate is, is it 6 x 2 or 3 x 1 corrugations?

**Response:** Plastic structural plate pipe, please see the above changes.

**Question:** In the bid book there are two wages scales, State and Federal, both listed for Highway, Androscoggin County, which takes precedence?

**Response:** WIN 020274.00 uses the federal wage decision and WIN 008850.40 uses the state wage decision.

Consider these changes and information prior to submitting your bid on March 19, 2014.

Sincerely,



George M.A. Macdougall P.E.  
Contracts & Specifications Engineer

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

\_\_\_\_\_ a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PINS. **20274.00 / 8850.40** for **Highway Overlay and Intersection Improvements** in the town/city of **New Gloucester and Auburn**, County of **Androscoggin**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **August 15, 2014**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

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## MAINE TURNPIKE AUTHORITY WORK PERMIT RULES AND GUIDELINES

Prior to any work or installation of any facility on **Maine Turnpike Authority** land, a **Municipality, Contractor, or other Person requesting access (Permittee)** is required to file application with the **Authority** for a work permit. Said permit will be issued under the following terms and conditions;

**Permittee** indemnifies and holds harmless the **Maine Turnpike Authority** from any and all responsibility related to work on the aforesaid property or the presence thereon of **Permittee's** employees and agents. This includes, but is not limited to, any claims, losses damages and expenses (including attorney's fees and litigation costs) that arise from or are related to the presence of **Permittee's** employees or agents on the property. Nothing contained herein is intended to waive the defenses and immunities available to the **Authority** with respect to third parties under the provisions of State or Federal Law including, but not limited to, the defenses and immunities provided under the Maine Tort Claims Act.

### Insurance

Prior to any entrance onto the **Authority's** land, **Permittee** will file with the **Authority** certificates of insurance evidencing public liability insurance and workers compensation insurance with such limits as the **Authority** shall require, which in all cases shall be a minimum of one million dollars (\$1,000,000), and the "**Maine Turnpike Authority**" shall be named as an additional insured.

**Permittee** shall maintain the insurance required by this paragraph with the **Authority** named as an additional insured, for so long as **Permittee's** employees or agents will be accessing **Authority** property whether the access is for construction or for routine maintenance and operation of this or any other installation.

### Schedule

**Permittee** shall notify the **Authority** in advance of its work schedule. The **Authority** must approve of the schedule, including traffic control plan, and may decide to have an Inspector present while the work is being completed. Time of day restrictions may be enforced based on time of year and peak travel flow.

### Costs

The **Permittee** shall be responsible for all costs incurred by the **Authority** acting in connection with the review, assessment, and negotiation of, and any necessary investigation into, any matters associated with this permit, including, but not limited to costs of reviewing any materials or documents submitted; any field work done in connection therewith, any dig safe, engineering, survey, personnel costs, or legal fees associated therewith, whether or not the project is ever carried to a successful conclusion. Prepayment of costs may be required at **Authority's** discretion.



### Safety

The **Permittee** must abide by all applicable local, state, and federal regulations pertaining to workplace safety, including but not limited to high visibility clothing, signage, and warning lights. Median openings and toll plaza U-turns will not be permitted. Any traffic stoppages will be done with the **Authority's** approval and with State Police participation.

### Revocation

The **Authority** further reserves the right to revoke the work permit in the event of a breach of its conditions as well as for any reason whatsoever that, in the sole judgment of the **Authority**, warrants such a revocation.

### Contact

The **Permittee** shall make application to the **Authority** in writing. Said application will include, but is not limited to applicable plan sheets showing scope of work, traffic control plans, schedule, and insurance certificate. Applications may be submitted to:

Maine Turnpike Authority  
Right of Way Department  
2360 Congress Street  
Portland, ME 04102

*For questions or additional information  
contact the Right of Way Department at  
(207) 871-7771 Ext. 370 or 350  
[row@maineturnpike.com](mailto:row@maineturnpike.com)*

At such time a work permit is issued by the Right of Way Department, the **Permittee** will be directed to the appropriate contact person for the duration of the project.

Dig Safe requests will be made to **Dig Safe** (1-888-DIG-SAFE or 811) and to the **Authority** for private utility identification. The dig safe job number and request is to be provided to:

William Franklin  
Deputy Director of Engineering & Building Maintenance  
2360 Congress Street  
Portland, ME 04102  
(207) 871-7771 Ext. 129  
[wfranklin@maineturnpike.com](mailto:wfranklin@maineturnpike.com)





Maine Turnpike Authority  
Date: January 26, 2011

The following Special Provision pertains to entry onto the Maine Turnpike Authority land by Contractors of the Maine Department of Transportation.

#### 110.3.8 Administrative & General Provisions

##### A. Additional Insured

The Maine Turnpike Authority shall be named as an additional insured.

#### 105.5.1 General Requirements

Subsection is amended by the addition of the following:

Prior to any work or installation of any facility on Maine Turnpike Authority land, a Contractor (Permittee) working for the Maine Department of Transportation is required to file application with the Authority for a Work Permit. Contractor must abide by the Maine Turnpike Authority agreement with the Maine Department of Transportation regarding Entry onto Maine Turnpike Authority Land by Contractors of the Maine Department of Transportation. All specific operational, safety, and environmental requirements of the Authority for a contractor will be followed.

The installation of construction signs on the Maine Turnpike shall be approved in advance by the Maine Turnpike Authority. The Contractor shall submit plans illustrating construction details and proposed locations. Signs shall be located behind guardrail or outside of the roadside recovery area or shall be installed on break away supports. The Contractor must contact the Maine Turnpike Authority Dig Safe vender to perform Dig Safe for Maine Turnpike Authority owned utilities on Maine Turnpike Authority property. The cost of this service is borne by the contractor.

This Subsection is amended by the addition of the following:

##### Change of Direction

The Contractor will not be allowed to use the median openings or the toll plaza on the Maine Turnpike to reverse direction unless the opening is located within a passing lane closures on both roadways.

The Contractor will not be allowed to change direction within the Toll Plaza area. The limits of this area extend from the terminals of the median guardrail north and south of the toll plaza.

The Contractor will be assessed a fine every time any employee of the Contractor, Subcontractor or Supplier is observed using a median opening or toll plaza area to change

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Date: January 26, 2011

direction on the Maine Turnpike. (The fine will be deducted from monies owed to the Contractor.)

The fines will be levied on a per occurrence basis as follows:

NUMBER OF Occurrences	Fine
First	\$150

For the second occurrence, and any occurrence thereafter, the fine is increased by \$150 per each occurrence. The number of occurrences is not specific to a Contract, an individual or a vehicle, but based solely on the number of times any employee of the Contractor, Subcontractor or Supplier is observed using a median opening anywhere on the Maine Turnpike.

#### 107.4.2 Schedule of Work Required

This Subsection is amended by the addition of the following:

The Contractor shall submit a schedule that shows all work on the Maine Turnpike that is anticipated for the following week. This schedule shall be transmitted to the Resident Engineer by noon Thursday of the preceding week. The Resident Engineer shall transmit this information to the Maine Turnpike Authority. Any lane or shoulder closures are subject to approval by the Maine Turnpike Authority.

The Contractor shall submit a schedule that shows all work within 1500' of the toll plaza and all toll plaza lane closures that are anticipated for the following week. This schedule shall be transmitted to the Resident Engineer by noon Thursday of the preceding week. The Resident Engineer shall transmit this information to the Maine Turnpike Authority.

The following Subsections are added:

#### 107.4.6 Prosecution of Work

The installation of permanent signs on the Maine Turnpike will require a shoulder closure in accordance with the MUTCD (Manual of Uniform Traffic Control Devices).

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Date: January 26, 2011

All work within 1500' of the toll plaza shall be coordinated with the Maine Turnpike Authority. Night work may be required to accommodate Turnpike operations. This work is required to be shown on the proposed schedule as noted in Section 107.4.2. The Engineer shall be responsible for coordinating the activities with the Maine Turnpike on site toll supervisor or his designee immediately prior to the operations. Restrictions in contractor operations may be required by the Maine Turnpike Authority.

652 Maintenance of Traffic

Subsection is amended by the addition of the following:

A mounted revolving Amber light or amber strobe light with 360-degree visibility.

SPECIAL PROVISION  
SECTION 502  
ANNULAR SPACE GROUTING

Description: This work shall consist of providing and placing non-shrink grout as described below. The annular space (void between the host and liner pipes) shall be completely grouted to support the liner and provide long-term stability. The Contractor shall provide testing of the materials and methods for compliance with the following requirements. Prior to any work the Contractor shall furnish an acceptable plan for performing and testing the grouting.

Preparation: After slip liner installation but prior to grouting, bulk heading of the ends and venting shall be constructed.

After bulk heading of the ends and venting, test the integrity of the installed liner pipe and constructed bulkheads for any leaks.

Planned Vents: The Contractor shall submit shop drawings or indicate in the installation plan the proposed number and location of vents relative to pipe diameter and stiffness for the grouting operations.

Materials: The grout material shall consist of portland cement (portland cement and fly ash) and/or additives as described in the following Subsections of Division 700 -  
Materials:

Portland Cement	701.01
Water	701.02
Air-Entraining Admixtures	701.03
Fine Aggregate	701.01
Fly Ash	701.10 Type F or C
Chemical Admixtures	701.04
Accelerating Admixtures	AASHTO M-194 Type "C"

(a) Compressive Strength: The grout shall have a minimum penetration resistance of 700 kPa [100 psi] in 24 hours when tested in accordance with ASTM C403 and a minimum compressive strength of 3500 kPa [500 psi] in 28 days when tested in accordance with ASTM C495 or C109.

(b) Performance Requirements: The Contractor shall submit the proposed grout mix, methods, plans and criteria of the grouting operations. The grouting system shall have sufficient gauges, monitoring devices and tests to determine the effectiveness of the grouting operation and to ensure compliance with the liner pipe specifications and design parameters.

(c) Mix Designs: One or more mixes shall be developed to completely fill the annular space based on the following requirements:

- (1) Size of annular void
- (2) Void (size) of the surrounding soil
- (3) Absence or presence of groundwater
- (4) Sufficient strength and durability to prevent movement of the liner pipe, and
- (5) Provide adequate retardation.

Qualifications: The Contractor shall demonstrate to the Resident its worker's capabilities of filling the annular space and performing their work in conformance with the Plans and the Specifications.

Grouting Equipment: The materials shall be mixed in equipment of sufficient size and capacity to provide the desired amount of grout material for each stage in a single operation. The equipment shall be capable of mixing the grout at densities required for the approved procedure and shall also be capable of changing density as dictated by field conditions any time during the grouting operation.

Injection Procedure and Pressure: The gauged pumping pressure shall not exceed the liner pipe Manufacturer's approved recommendations. Pumping equipment shall be of a size sufficient to inject grout at velocity and pressure relative to the size of the annular space. Gauges to monitor grout pressure shall be attached immediately adjacent to each injection port. The gauge shall conform to an accuracy of not more than one-half percent error over the full range of the gauge. The range of the gauge shall be not more than 100 percent greater than the design grout pressure. Pressure gauges shall be instrument oil filled and attached to a saddle type diaphragm seal (gauge saver) to prevent slogging with grout. All gauges shall be certified and calibrated in accordance with ANSI B40 Grade 2A.

Test Section: The Contractor shall be required to perform a test on each type of grout and grout system proposed to be used.

Submittals and Required Calculations: The Contractor shall submit the following to the Resident for his review and approval at least 30 working days prior to the start of the grouting operation:

- (1) The proposed grouting mix
- (2) The proposed densities and viscosities
- (3) Initial set time of the grout
- (4) The proposed grouting method
- (5) The maximum of injection pressures
- (6) The 24-hour and 28 day compressive strengths
- (7) Proposed grout stage volumes
- (8) Bulkhead designs
- (9) Buoyant force calculations
- (10) Flow control
- (11) Provisions for service connections

- (12) Pressure gauge certification
- (13) Vent location plans
- (14) Certification that grouting plan conforms with all provisions, cautions and restrictions or the liner manufacturer.

These shall be submitted as a complete package for a single or sample section only. The Contractor shall notify the Resident of any changes to be made in grouting.

Method of Measurement: Grout satisfactorily placed and accepted will not be measured for payment but will be considered incidental to **Item 509.202-Culvert Slip Lining**.

Basis of Payment The accepted work done under Annular Space Grouting including all forms, berms, bulkheads, pumping, and incidentals necessary will be **considered incidental to Item 509.202-Culvert Slip Lining**.

SPECIAL PROVISION  
SECTION 509  
CULVERT SLIPLINING

Description This work shall consist of inserting a plastic structural plate pipe into an existing culvert in accordance with the plans and specifications.

Materials Materials shall meet the requirements of the following specifications:

Approved Polyethylene Pipe 706.08  
(See plan sheet 3 for weir typical)

Construction Requirements Handle and assemble all elements of the structure in accordance with the manufacturer's instructions, except as modified herein, on the plans or as ordered by the Resident in writing. The Contractor shall submit fabrication details including assembly drawings, pipe insertion methods, internal joint coupling and bracing details, to the Resident for review. The Resident will be allowed a minimum of 7 working days to review the Contractor's submittal.

Thoroughly coat the pipe exterior with a primer or alkali resistance lacquer. Locate grout holes and fittings as specified in the contract plans. Repair damage to the aluminum coating due to drilling and welding in accordance with the pipe manufacturer's recommendations prior to applying primer.

The Contractor will dewater, inspect, and clean the existing culvert. The Resident and Contractor shall identify voids in the backfill around the existing culvert by visual inspection or by chain drag or other sounding method acceptable to the Resident. The Contractor shall fill all voids by cutting holes in the culvert and pumping grout into the areas of lost backfill. The Contractor shall provide strutting and bracing to insure the stability of the existing culvert during this operation.

The Contractor may push or pull pipe sections into place. The Contractor shall utilize skids in the existing culvert, to facilitate placement of the pipe sections. The displacement between adjacent pipe ends shall not exceed 13 mm [ $\frac{1}{2}$  in].

Brace the pipe sections against the existing culvert such that the new pipe shall remain in place during grouting operations. The Contractor is responsible for assuring that the pipe does not "Float" during the grouting operation. Provide for a minimum 25 mm [1 in] of grout between the new and existing culverts. Bracing material shall not significantly impede grout flow into the annular space between the culverts. Insert aluminum plugs into a grout fitting after the grouting operation is complete at that fitting.

Remove bracing bolts 7 days after the completion of grouting operations. Cut and grind smooth bracing bolts which cannot be turned out, then coat ground end with zinc primer.

Joints: Strut internal joint couplings prior to grouting operation. The internal couplings and struts shall remain in place for 7 days after the completion of grouting.

Seals: Place plywood or material of equivalent strength, in the annular space at each end of the culvert, to retain grout. Seals may be left in place providing they do not interfere with bank protection.

Method of Measurement Culvert sliplining shall be measured by the lump sum.

Basis of Payment Payment for culvert sliplining will be full compensation for furnishing all labor, materials, equipment necessary to manufacture and install the corrugated aluminum pipe complete and in place, including: but not limited to dewatering, cleaning, inspecting, strutting, bracing, skids, concrete, joint bands, seals, installing grout nipples, plugs, fittings, hardware, and damaged pipe repair. Grout used to fill the annular space and backfill voids will be in accordance with Special Provision 502, Annular Space Grouting.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
509.202 Culvert Sliplining	Lump Sum